

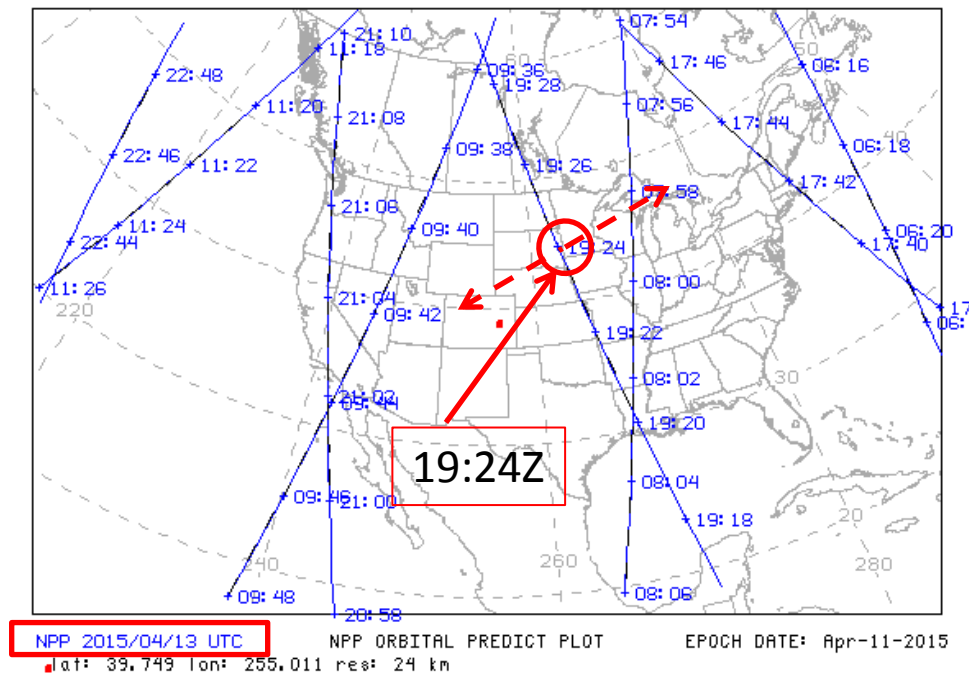
RAQMS 20150411 SONGNEX

78hr FX for 18Z April 13, 2015

S-NPP (CrIS) overpass on 2015/04/13

NUCAPS CO₂, O₃, CO, CH₄ Validation Opportunity –*near western edge of swath*

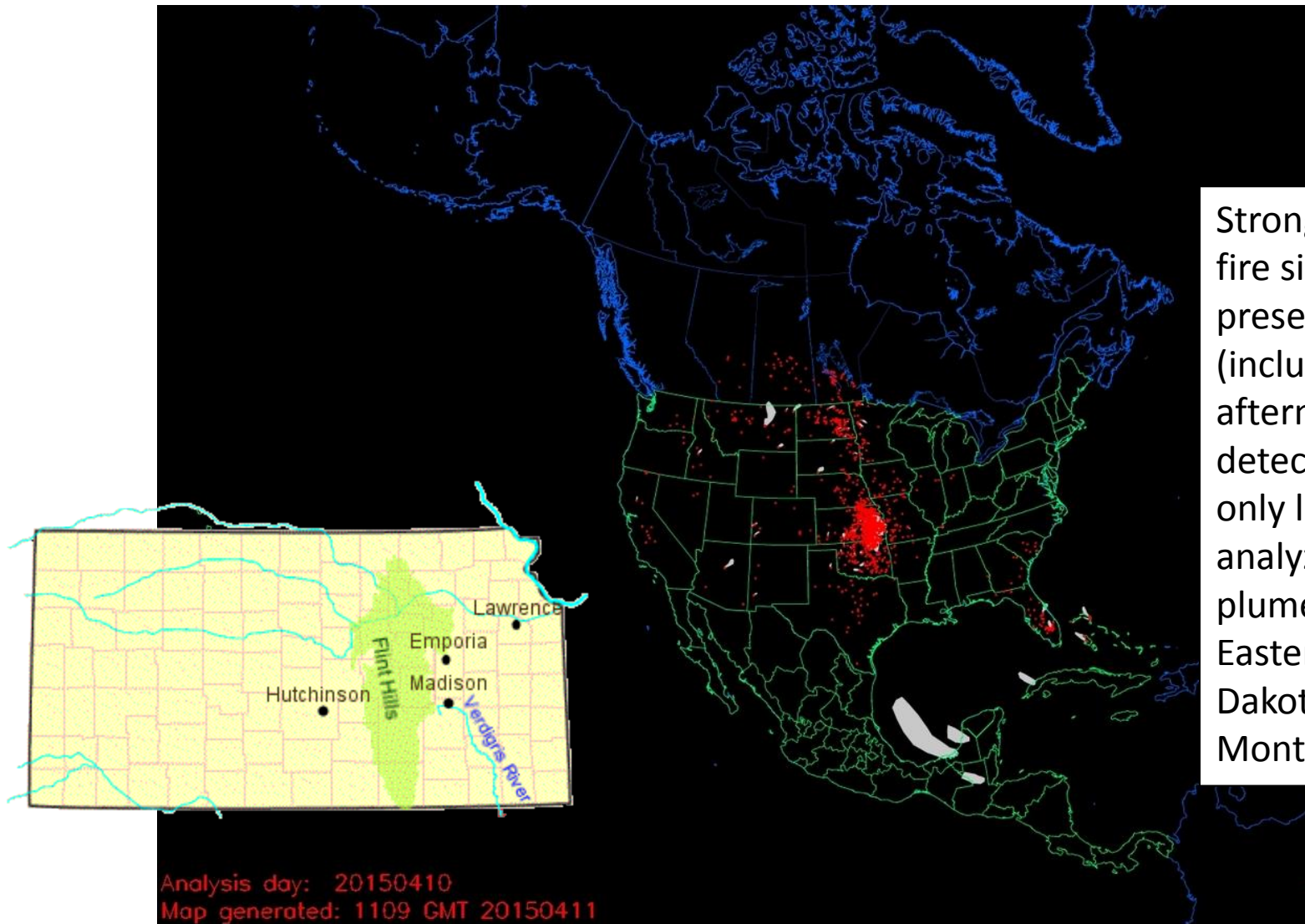
S-NPP overpass over Denver at 19:24Z (1:24pm Mountain)



Approximate swath width

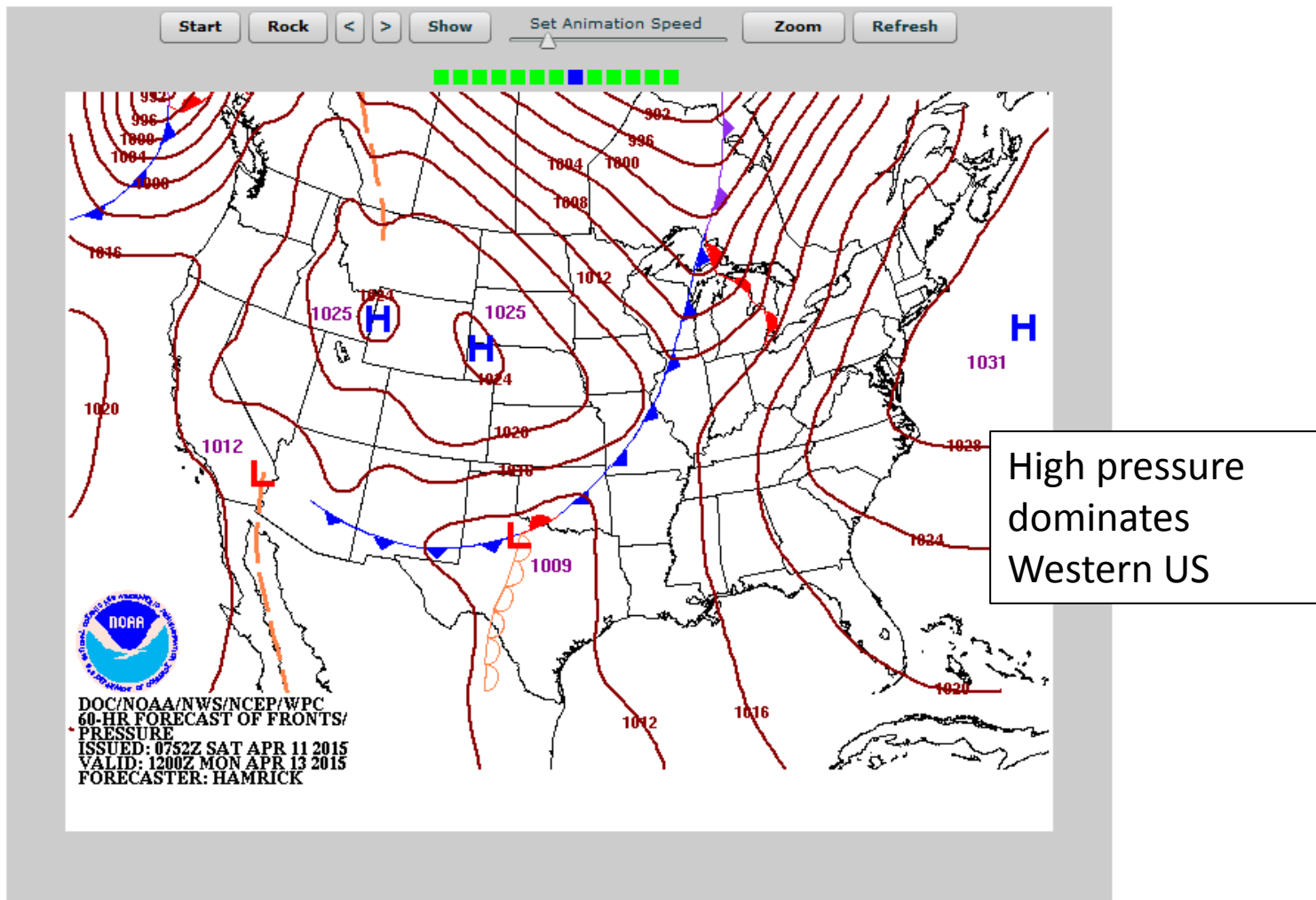
NESDIS Hazard Mapping System (HMS)

<http://www.ospo.noaa.gov/data/land/fire/currenthms.jpg>



Strong Flint Hill fire signature present yesterday (including afternoon detection) but only localized analyzed smoke plumes – Fires in Eastern North Dakota and Montana as well

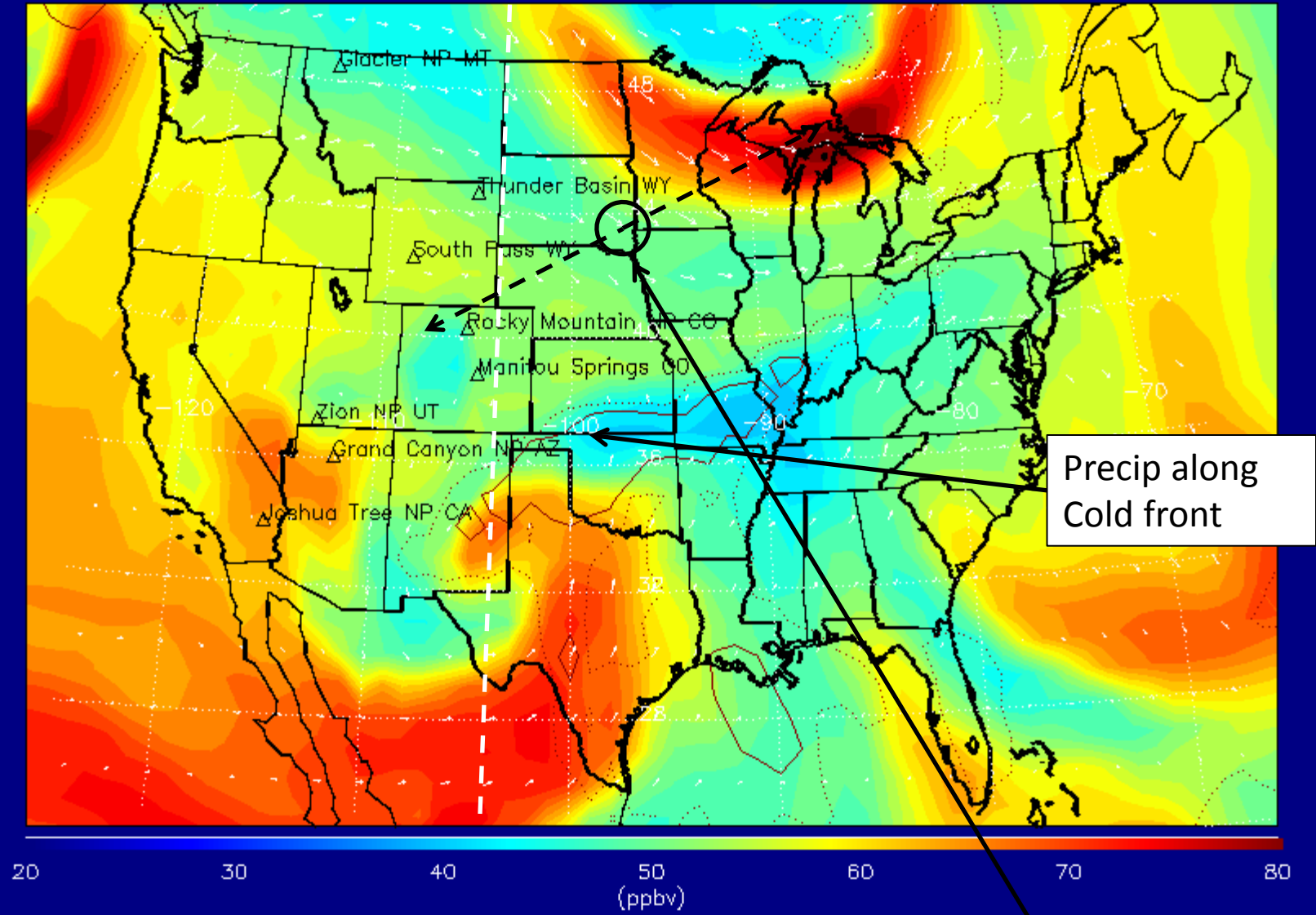
60hr NCEP/WPC forecast valid 12Z 04/13/2015



<http://www.hpc.ncep.noaa.gov/basicwx/day0-7loop.html>

05km O₃ 18Z 20150413

(MSL Pressure Contoured (white)/95-75% Convective Precip (Red) 95% CPDP=0.177979 mm/hr



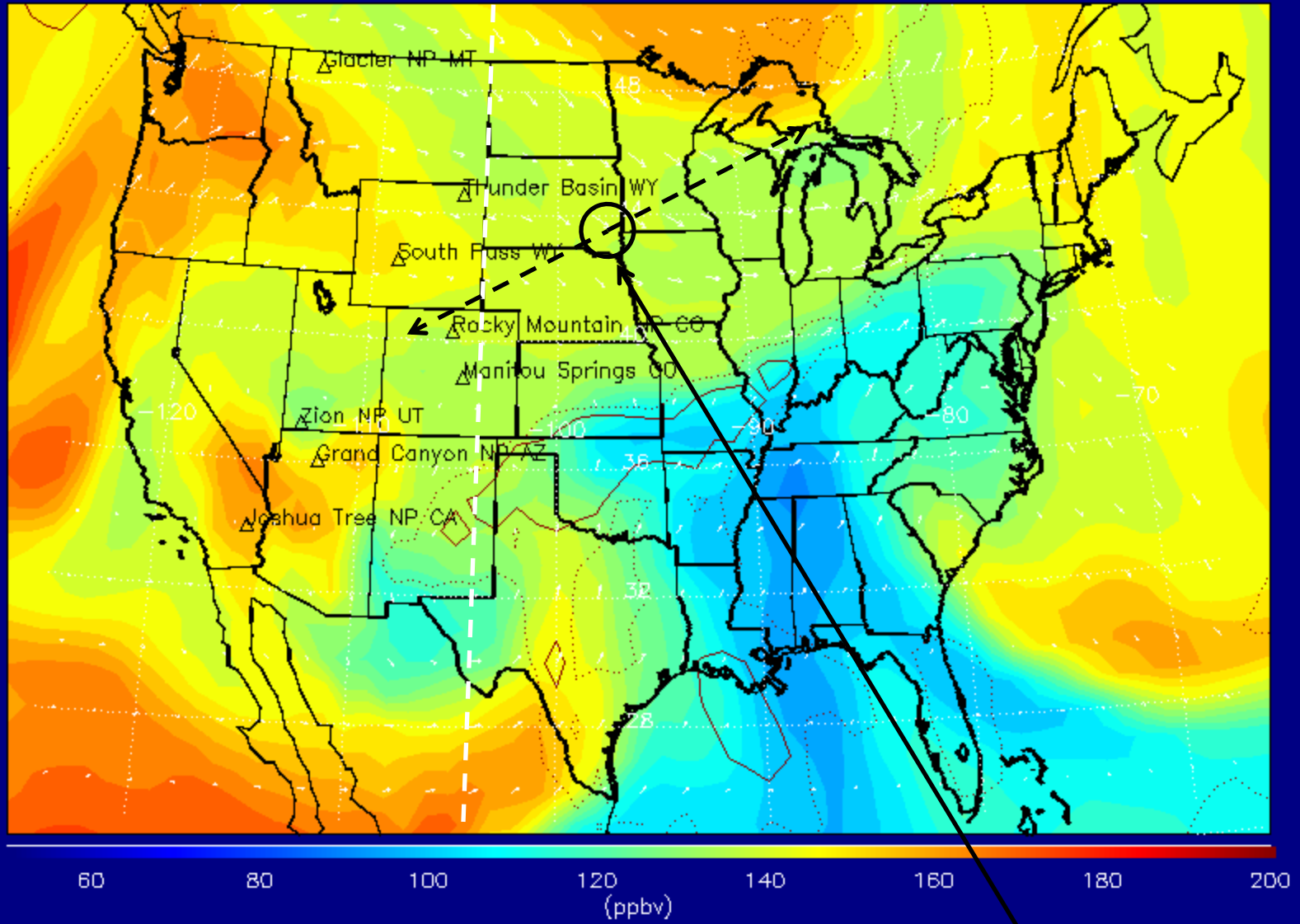
RAQMS₆ 78hr Fx Initialized 12Z 20150410

Denver on western edge of S-NPP swath

Approximate swath width

05km CO 18Z 20150413

(MSL Pressure Contoured (white)/95-75% Convective Precip (Red) 95% CPQP=0.177979 mm/hr



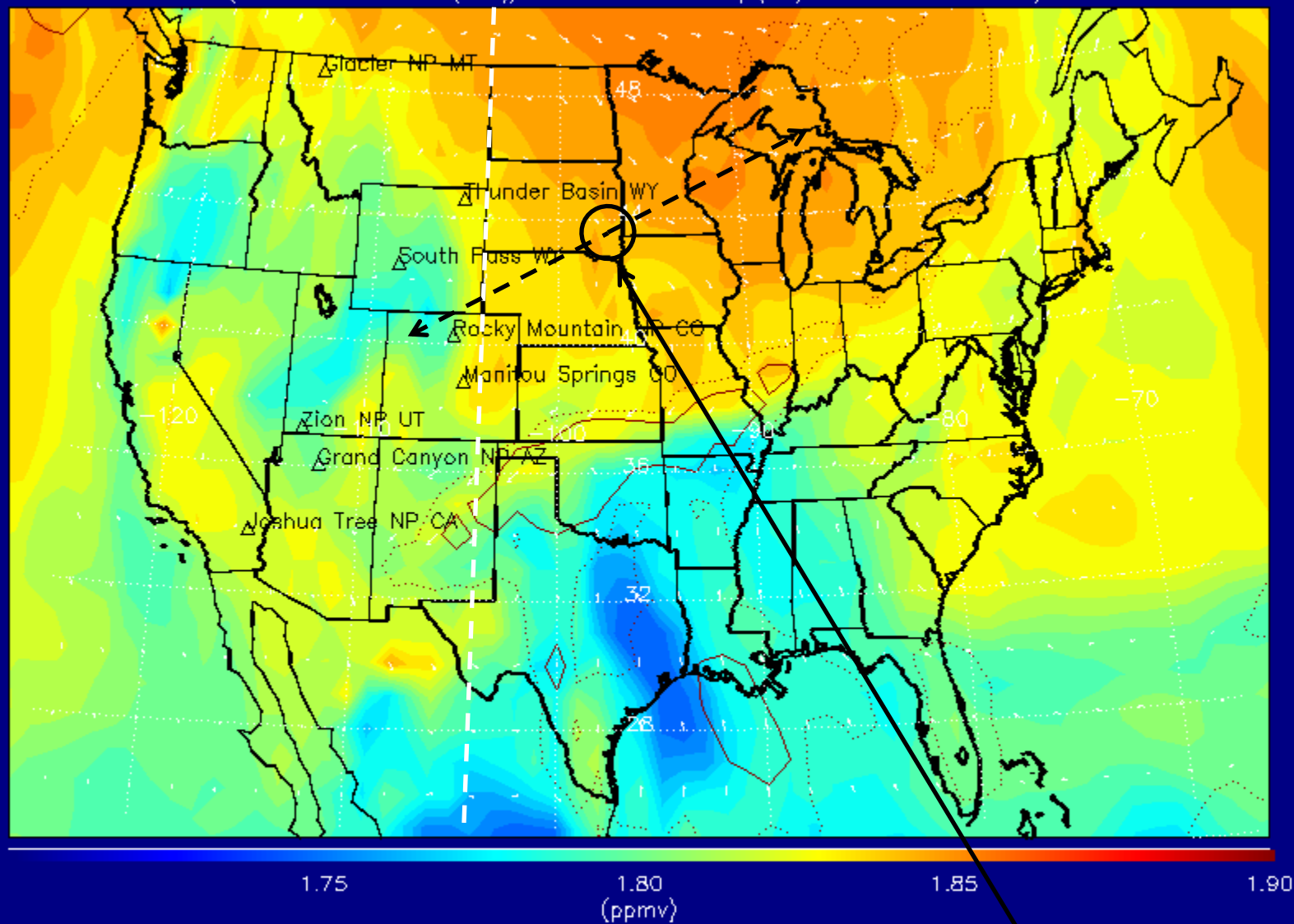
RAQMS₆ 78hr Fx Initialized 12Z 20150410

Denver on western edge of S-NPP swath

Approximate swath width

01km AGL CH₄ 18Z 20150413

(MSL Pressure Contoured (white)/95-75% Convective Precip (Red) 95% CPCP=0.177979 mm/hr

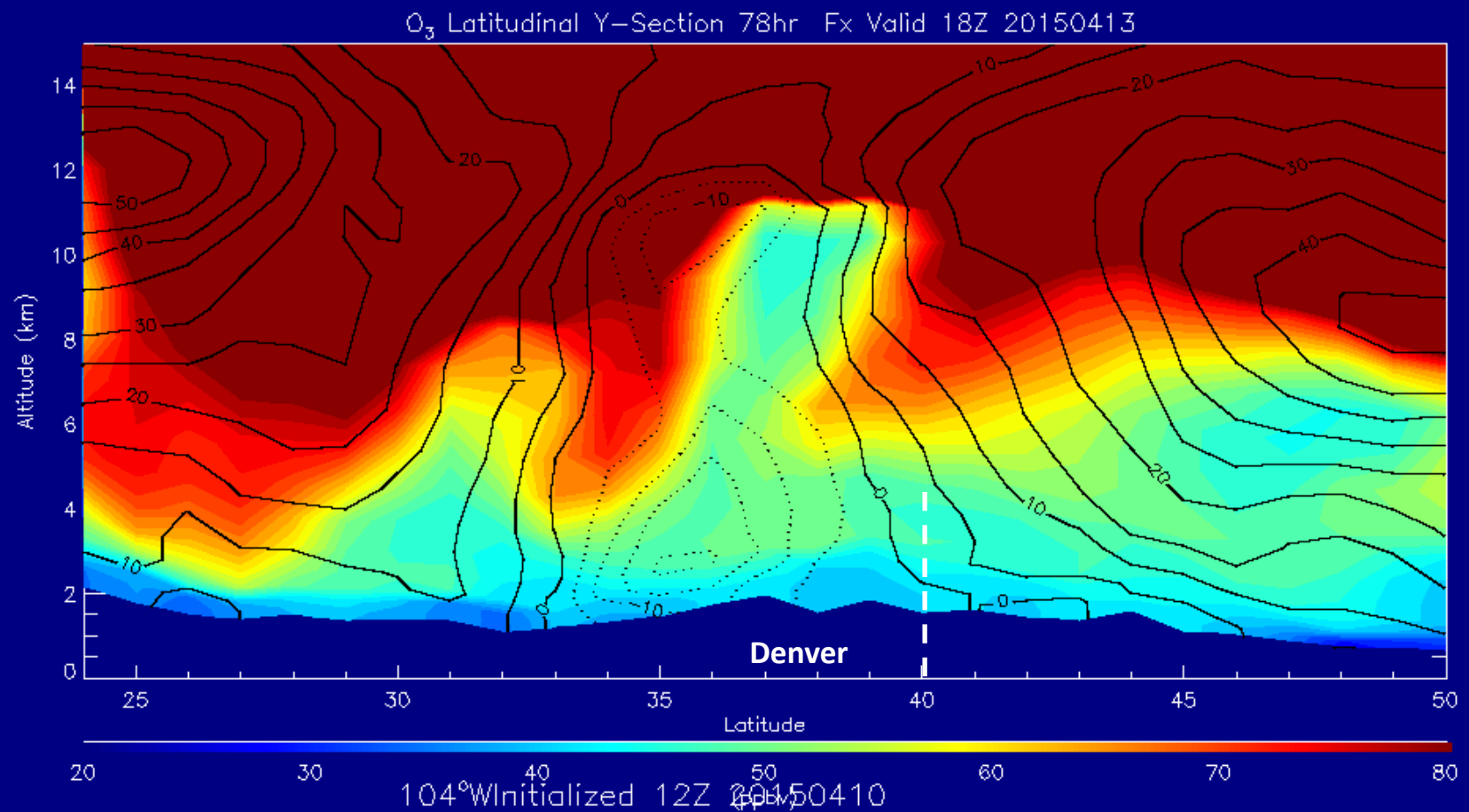


RAQMS₆ 78hr Fx Initialized 12Z 20150410

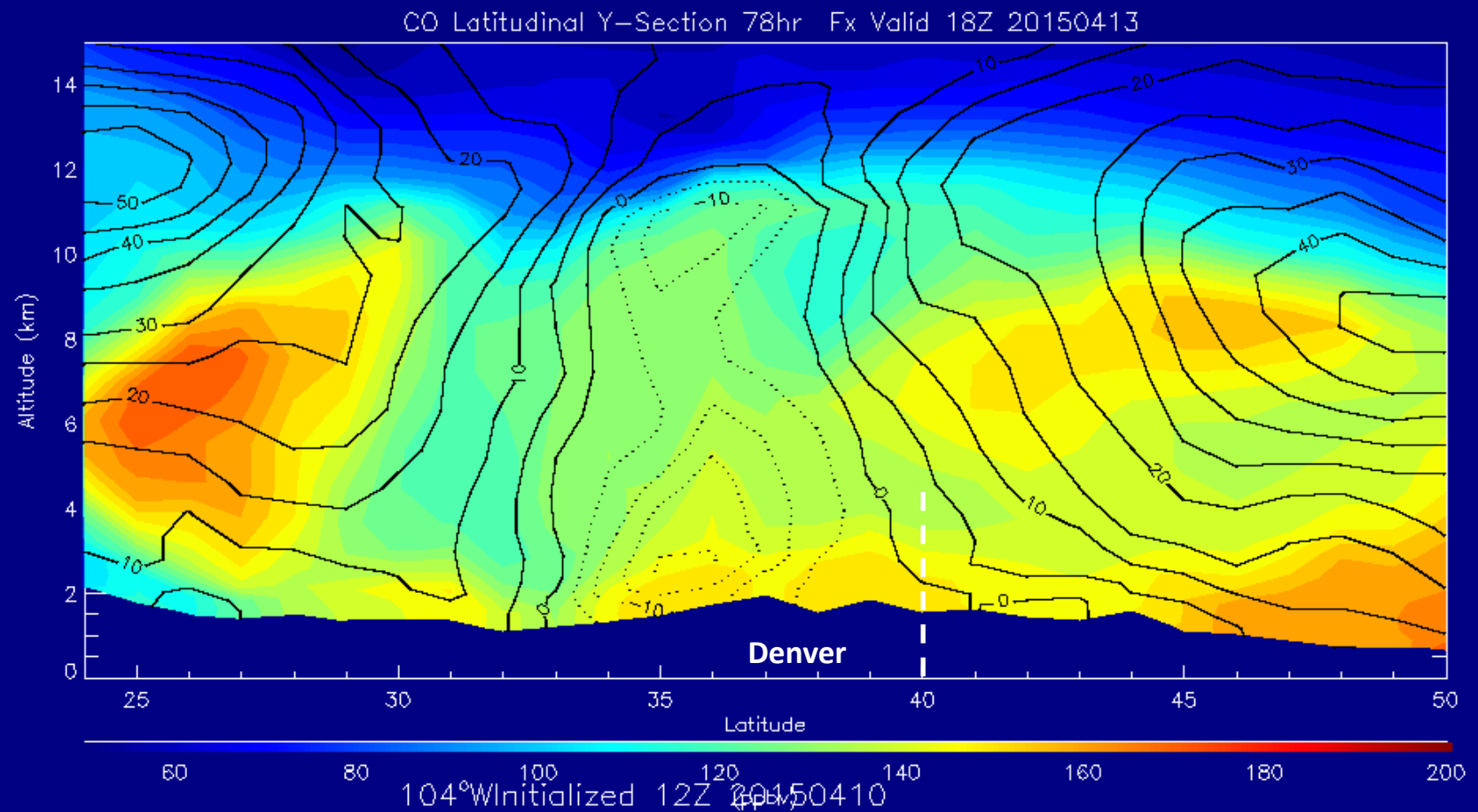
Denver on western edge of S-NPP swath

RAQMS surface CH₄ constrained with 1990 mixing ratio – introduces ~0.1ppmv low bias

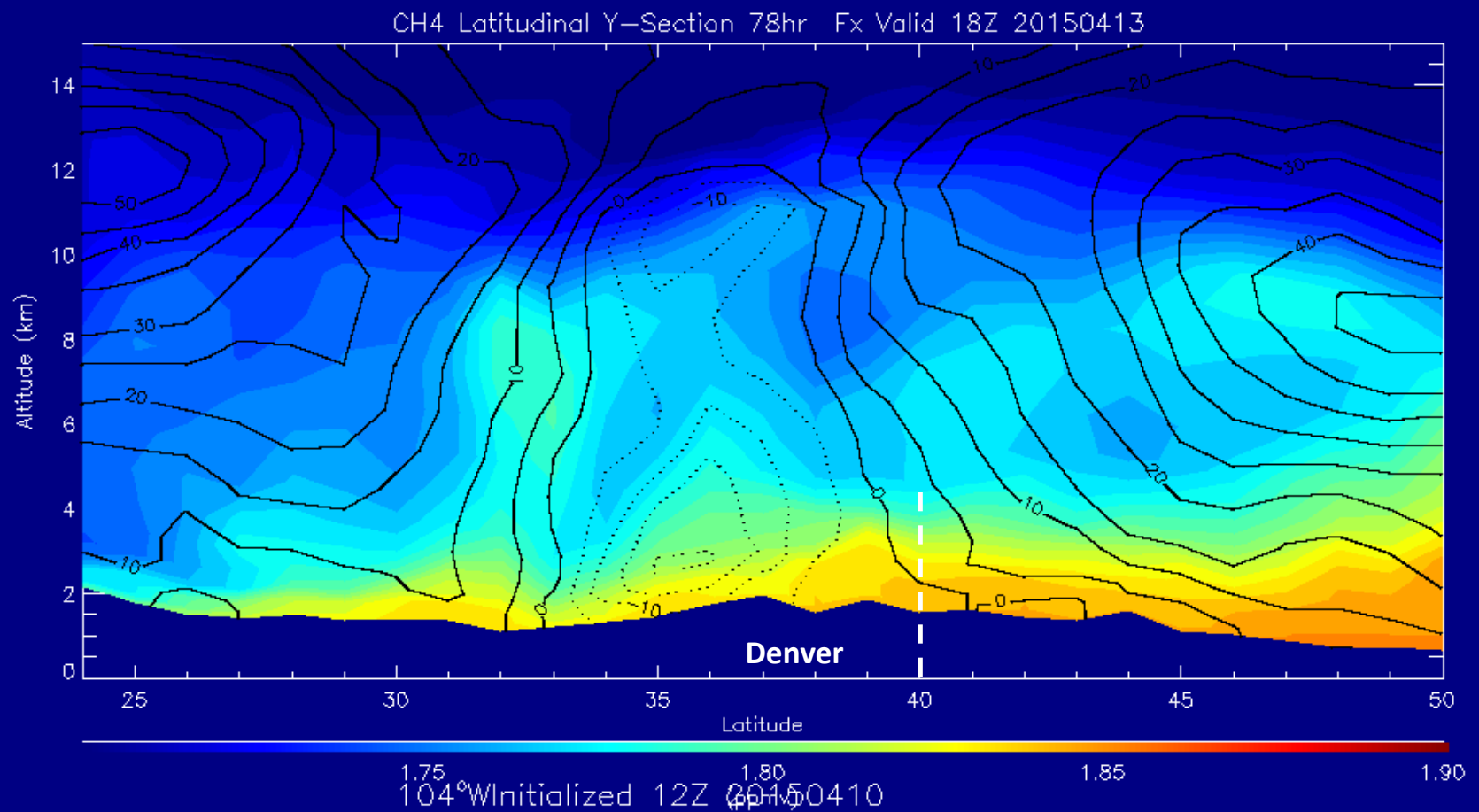
RAQMS 78hr FX O₃ Cross-section at 104W
(Denver, CO)

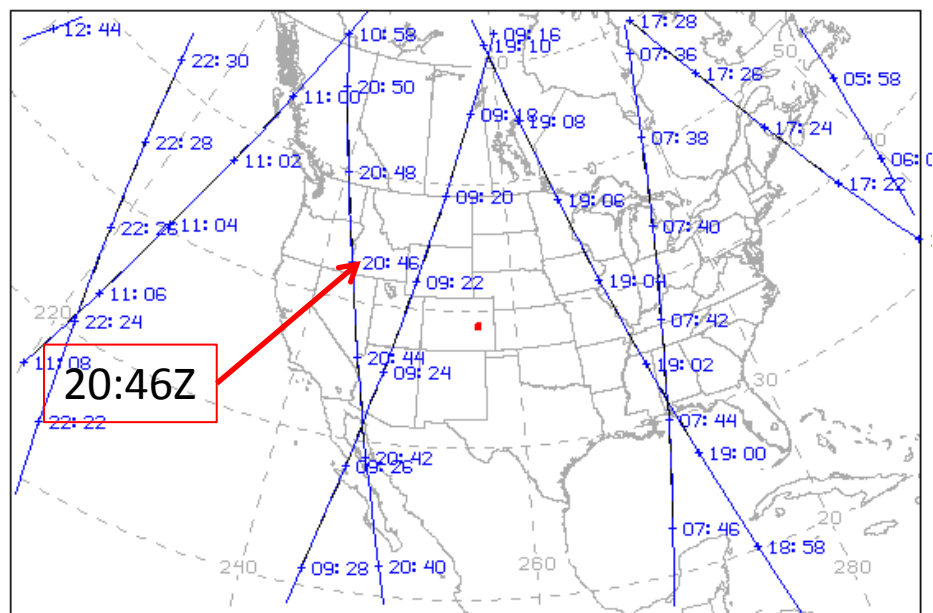


RAQMS 78hr FX CO Cross-section at 104W (Denver, CO)



RAQMS 78hr FX CH₄ Cross-section at 104W (Denver, CO)



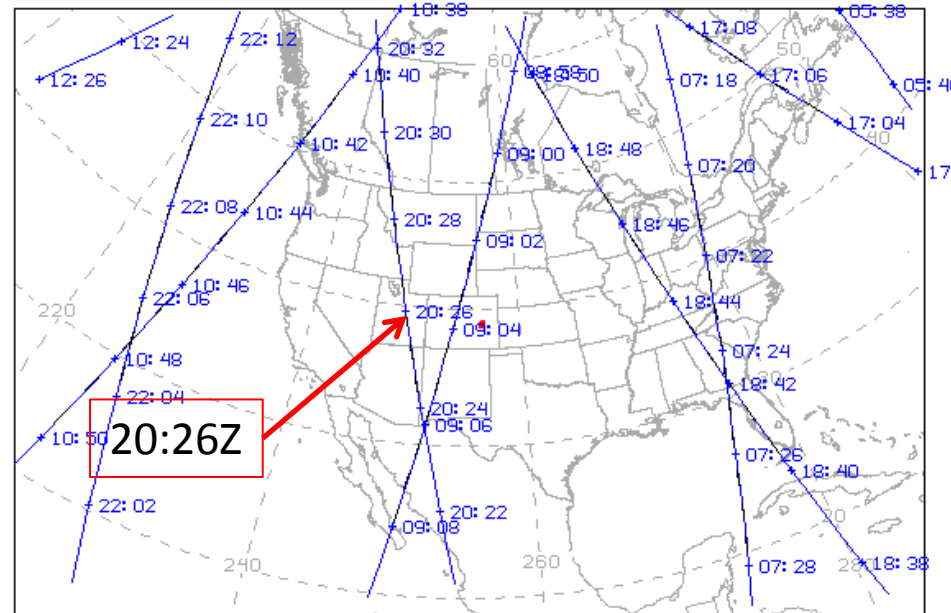


NPP 2015/04/14 UTC

NPP ORBITAL PREDICT PLOT

EPOCH DATE: Apr-11-2015

lat: 39.749 lon: 255.011 res: 24 km

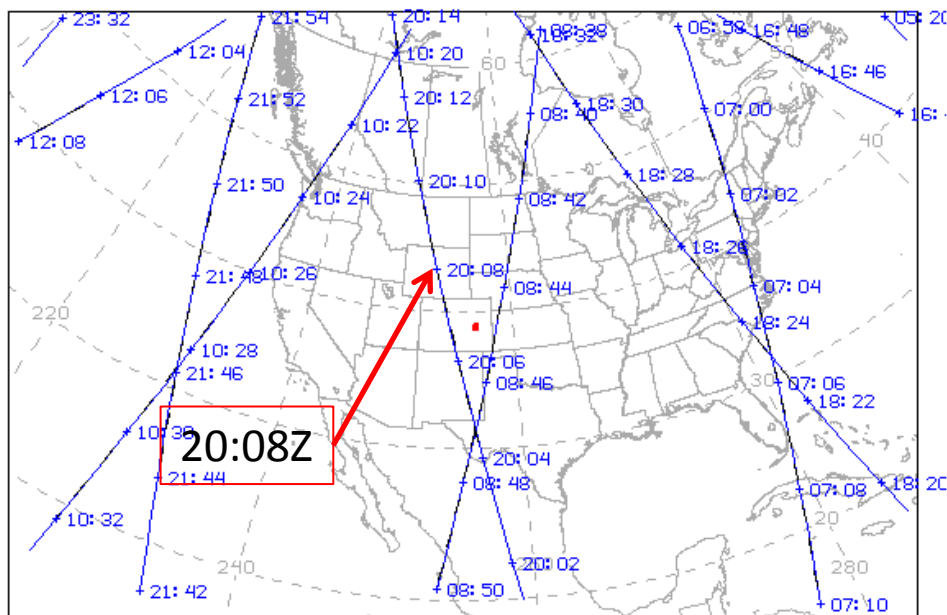


NPP 2015/04/15 UTC

NPP ORBITAL PREDICT PLOT

EPOCH DATE: Apr-11-2015

lat: 39.749 lon: 255.011 res: 24 km

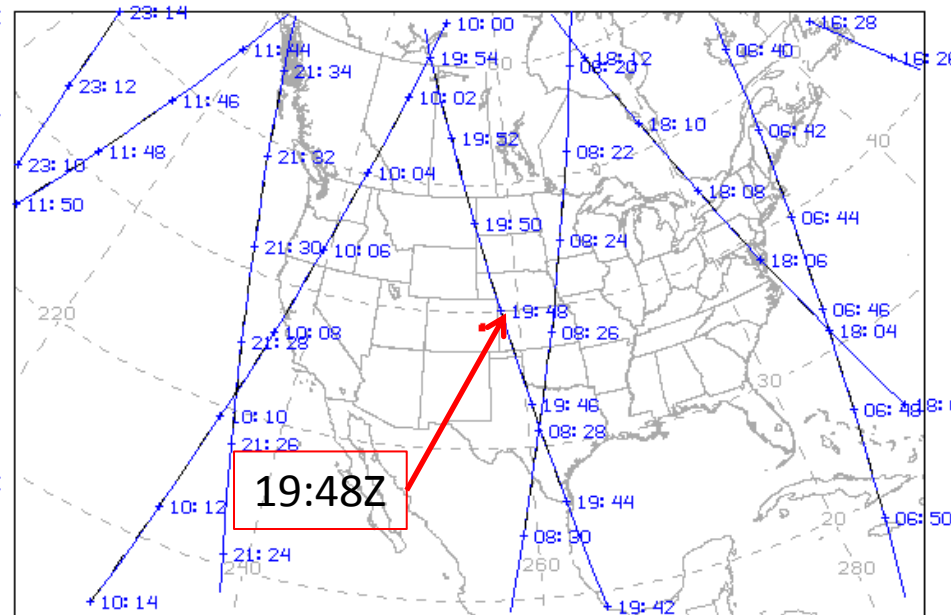


NPP 2015/04/16 UTC

NPP ORBITAL PREDICT PLOT

EPOCH DATE: Apr-11-2015

lat: 39.749 lon: 255.011 res: 24 km



NPP 2015/04/17 UTC

NPP ORBITAL PREDICT PLOT

EPOCH DATE: Apr-11-2015

lat: 39.749 lon: 255.011 res: 24 km